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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,809	10/19/2001	Dietmar Rudolph	20811/0204775-US0	8344
7278	7590	11/23/2009		
DARBY & DARBY P.C. P.O. BOX 770 Church Street Station New York, NY 10008-0770			EXAMINER JAMAL, ALEXANDER	
			ART UNIT 2614	PAPER NUMBER
			MAIL DATE 11/23/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/980,809	Applicant(s) RUDOLPH, DIETMAR	
	Examiner ALEXANDER JAMAL	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4,6-8,10-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Amendment

1. As per the included interview summary, examiner notes that applicant has admitted the ‘multi-stage modulator’, ‘internet’, ‘data base storing’, ‘automatic switchover’ and ‘frequency prognosis’ terms in the claims are –not- described in the specification, and are read to be well known terms that one of skill in the art would obviously know how to apply to applicant’s claimed invention (or to any other invention in the same field).
2. The examiner notes that applicant’s specification does not specifically define the term ‘digital quality data’ in the specification. As such the examiner reads the term broadly as a digital indication of a signal parameter.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 4,8,12-14,6,7,10,11** are rejected under 35 U.S.C. 102(e) as being anticipated by Kleider et al. (6084919).

As per **claim 4**, Kleider discloses a system that performs a method to improve the quality by controlling the parameters of a digital radio transmission (ABSTRACT, Fig. 5). The method comprises receiver 16 (Fig. 2) adjacent to target area 14 that evaluates quality data via blocks 34,36, to determine parameters C,F,B,P,b that are transmitted automatically to transmitter 12. Kleider discloses that the wireless network may be connected to the internet (Col 1 lines 10-20). The channel classification monitor 26, in combination with block 34 perform a frequency prognosis via transmitted parameters Cce' and F for the purpose of influencing the channel coder 22 and source coder 20 of the transmitter. The parameters are stored in spectrum table memory 27. The parameters also need to inherently be stored at every processing stage of the system and method for the purpose of allowing the digital processing to occur. The spectrum is produced via digital means in a digital processing system. The parameters indicating the signal characteristics are digital signals. Either of these can read as 'digital quality data'. In addition the digital received data can be considered the 'digital quality data' because that is analyzed in order to determine the spectrum. The examiner notes A/D converter (Col 5 lines 20-40), and notes that all of the processing is done digitally.

As per **claim 8**, it is rejected as per the claim 4 rejection. The multi mode modulator can vary the transmit frequencies of the system (Col 4 lines 30-45).

As per **claims 12,13**, they are rejected as per the claim 8 rejection. The block 34 of Fig. 2 comprises a feedback channel that increases reception quality and coverage reliability by preselecting better coding/modulation.

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As per **claim 14**, it is rejected as per the claim 12 rejection. Kleider discloses (Col 4 lines 30-40) that the multi mode modulator can vary the type of modulation. Examiner notes that a QAM modulation (which is well known in spread spectrum communications) may have any number of different stages (carriers). Examiner reads each of these as a different 'type' and notes that the modulator and channel interleaver would function to vary the number of stages in order to increase transmission quality.

As per **claims 6,10**, the transmission is wirelessly broadcast (Fig. 5).

As per **claims 7,11**, they are rejected as per **claim 4** rejection.

Response to Arguments

1. Applicant's arguments with respect to all claims have been considered but are not persuasive.

As per applicant's arguments that Kleider does not disclose a receiver receiving and analyzing a digital radio signal, the examiner disagrees and notes Kleider Fig. 2 which clearly shows a transmitter 12 sending a digital radio signal to a receiver 16, so that the receiver may analyze the received transmission, and determine parameters to send back to the transmitter for a subsequent transmission via a separate link 40.

Kleider discloses that the channel is analyzed via an incoming signal (which may be wired or wireless (received high frequency digital signal)) (Col 5 lines 1-40). This may be thought of as digital quality data, in addition to the parameters or the spectrum estimate. All of these are used to vary the transmission parameters.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Jamal whose telephone number is 571-272-7498, and whose email address is alexander.jamal@uspto.gov

The examiner can usually be reached on M-F 8AM-5PM.

If attempts to reach the examiner by telephone or email are unsuccessful, the examiner's supervisor, Curtis A Kuntz can be reached on 571-272-7499.

The fax phone numbers for the organization where this application or proceeding is assigned are **571-273-8300** for regular communications and **571-273-8300** for After Final communications.

/Alexander Jamal/

Primary Examiner, Art Unit 2614

Examiner Alexander Jamal

November 23, 2009